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(54) **CONVERSATION EXPLORER WITH SPLIT NAVIGATION USER INTERFACE**

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CPC ..................................... *H04L 51/16* (2013.01)

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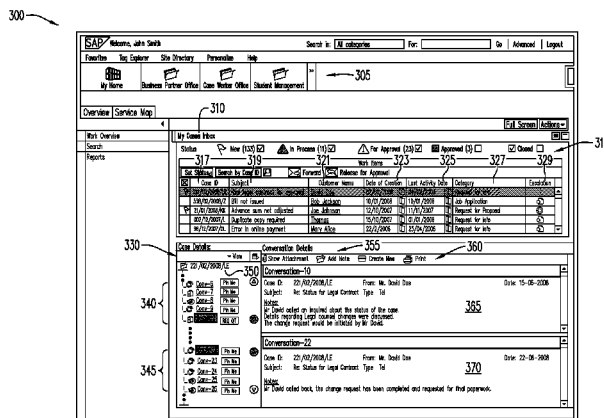(74) *Attorney, Agent, or Firm* — Buckley, Maschoff & Talwalkar LLC

(57) **ABSTRACT**

According to some embodiments, a method and system provides receiving a list of a plurality of conversations, each of the conversations associated with a common set of characteristics and each of the conversations having associated conversation details; presenting at least a portion of the list of the plurality of conversations in a user interface, each of the conversations included in the presented portion of the list being separately represented; receiving a selection of a plurality of the conversations included in the presented portion of the list; and presenting, simultaneously and grouped together in the user interface, conversation details associated with each of the selected plurality of the conversations, separate and apart from the presented portion of the list.

**22 Claims, 7 Drawing Sheets**

100
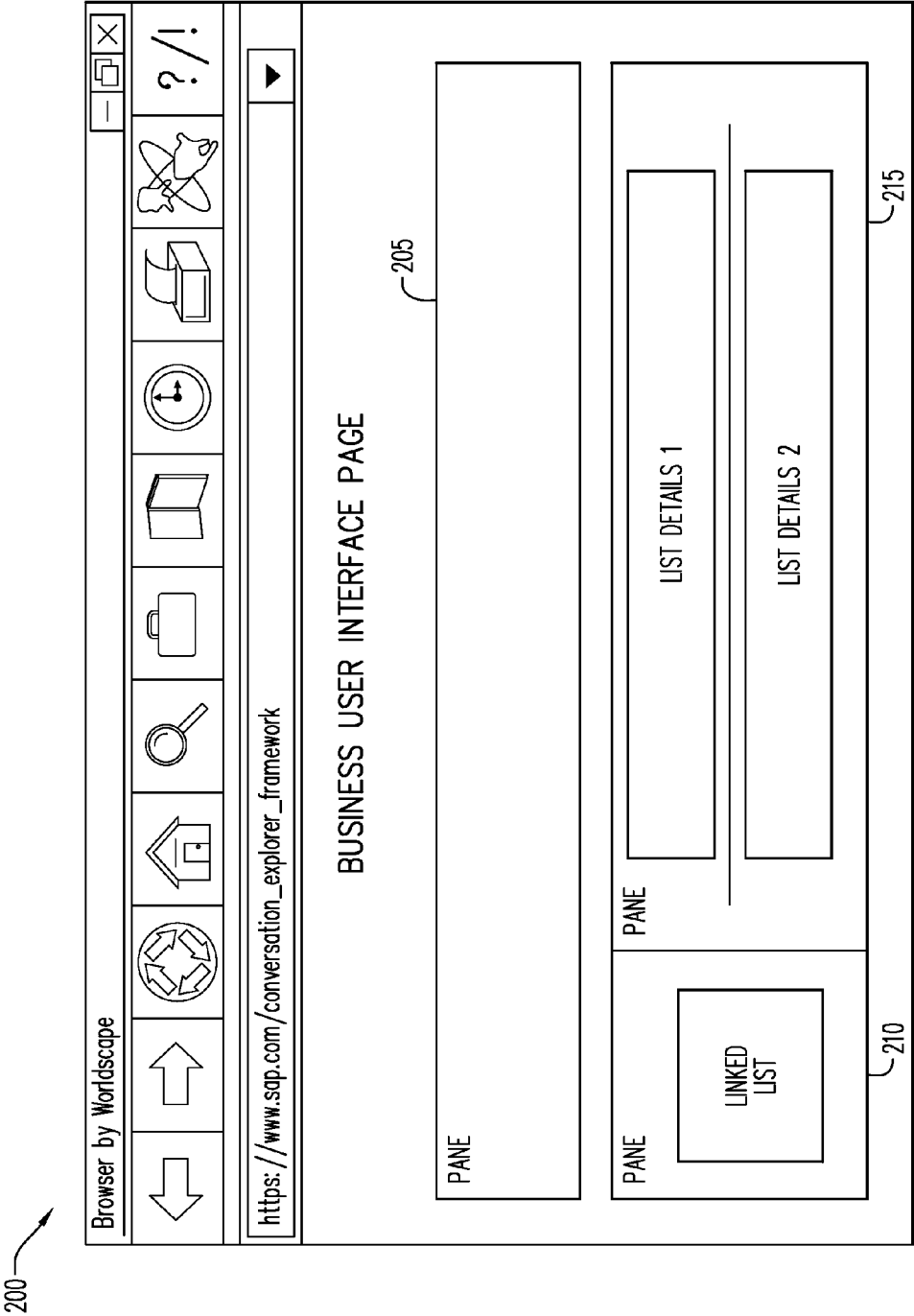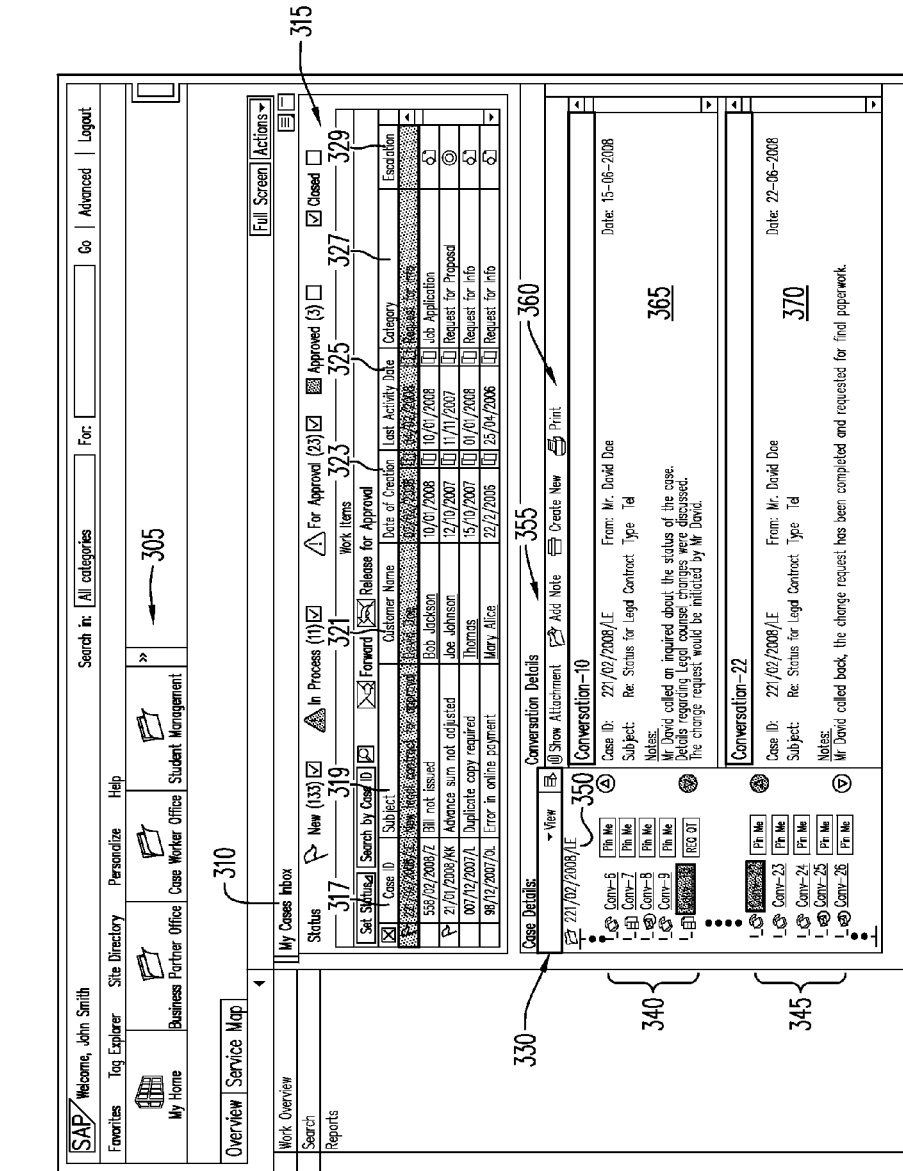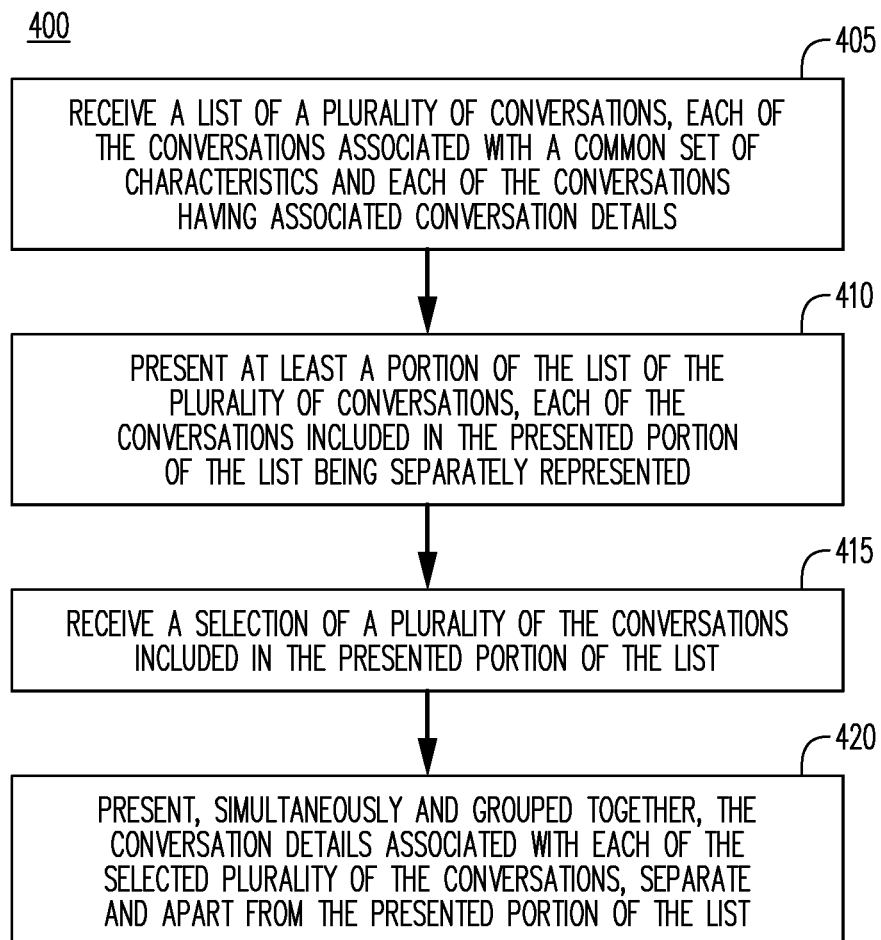
105

CLIENT

REQUEST          RESPONSE

115

NETWORK

REQUEST          RESPONSE

110

BUSINESS SERVICE PROVIDER

*FIG. 1*

Browser by Worldscape

https://www.sap.com/conversation_explorer_framework

BUSINESS USER INTERFACE PAGE

205

PANE

PANE

PANE

LINKED LIST

210

LIST DETAILS 1

LIST DETAILS 2

215

*FIG. 2*

200

FIG. 3

<u>400</u>

┌─────────────────────────────────────────────────────────┐ ⌐405
│   RECEIVE A LIST OF A PLURALITY OF CONVERSATIONS, EACH OF  │
│    THE CONVERSATIONS ASSOCIATED WITH A COMMON SET OF       │
│    CHARACTERISTICS AND EACH OF THE CONVERSATIONS           │
│          HAVING ASSOCIATED CONVERSATION DETAILS            │
└─────────────────────────────────────────────────────────┘

┌─────────────────────────────────────────────────────────┐ ⌐410
│        PRESENT AT LEAST A PORTION OF THE LIST OF THE       │
│           PLURALITY OF CONVERSATIONS, EACH OF THE          │
│      CONVERSATIONS INCLUDED IN THE PRESENTED PORTION       │
│        OF THE LIST BEING SEPARATELY REPRESENTED            │
└─────────────────────────────────────────────────────────┘

┌─────────────────────────────────────────────────────────┐ ⌐415
│    RECEIVE A SELECTION OF A PLURALITY OF THE CONVERSATIONS │
│      INCLUDED IN THE PRESENTED PORTION OF THE LIST         │
└─────────────────────────────────────────────────────────┘

┌─────────────────────────────────────────────────────────┐ ⌐420
│     PRESENT, SIMULTANEOUSLY AND GROUPED TOGETHER, THE      │
│     CONVERSATION DETAILS ASSOCIATED WITH EACH OF THE       │
│     SELECTED PLURALITY OF THE CONVERSATIONS, SEPARATE      │
│    AND APART FROM THE PRESENTED PORTION OF THE LIST        │
└─────────────────────────────────────────────────────────┘

*FIG. 4*

**FIG. 5**

600

SAP  Welcome, John Smith                              Search in: All categories          For:              Go | Advanced | Logout
Favorites  Tag Explorer  Site Directory  Personalize  Help

My Home  Business Partner Office  Case Worker Office  Student Management

Overview | Service Map                                                        Full Screen |Actions▾

Work Overview
Search          My Cases Inbox
Reports          Status    New (133)   In Process (11)   Forward   Release for Approval   For Approval (23)   Approved (3)   Closed

Work Items
Set Status  Search by Case ID
Case ID      Subject                    Customer Name   Date of Creation  Last Activity Date  Category              Escalation
558/02/2008/7  Bill not issued            Bob Jackson      10/01/2008                           Job Application
21/01/2008/KK  Advance sum not adjusted  Joe Johnson      12/10/2007       11/11/2007          Request for Proposal
007/12/2007/L  Duplicate copy required    Thomas           15/10/2007       01/01/2008          Request for Info
98/12/2007/0L  Error in online payment    Mary Alice       22/2/2006        25/04/2006          Request for Info

Conversation-Details
Show Attachment    Add Note   Create New    Print

Conversation-10
Case ID:  221/02/2008/LE          From: Mr. David Doe
Subject:  Re: Status for Legal Contract Type_Tel
Notes:
Mr. David called an inquired about the status of the case.
Details regarding Legal counsel changes were discussed.
The change request would be initiated by Mr David.

Conversation-22
Case ID:  221/02/2008/LE          From: Mr. David Doe
Subject:  Re: Status for Legal Contract Type_Tel
Notes:
Mr David called back, the change request has been completed and rec

Case-Details:
221/02/2008/LE  ALL  REQ OT  MSG  CLOSED
Conv-6  Pin Me
Conv-7  Pin Me
Conv-8  Pin Me
Conv-9  Pin Me
Conv-23  Pin Me
Conv-24  Pin Me
Conv-25  Pin Me
Conv-26  Pin Me

Case Details:                                              Date: 15-06-2008
▾View   605
630
221/02/2008/LE   ALL  REQ OT  MSG  CLOSED
615    610
Conv-6   Pin Me
Conv-7   Pin Me
625

FIG. 6

**FIG. 7**

# CONVERSATION EXPLORER WITH SPLIT NAVIGATION USER INTERFACE

## FIELD

Some embodiments generally relate to a user interface. More specifically, some embodiments provide a method and system for navigating and comparing related conversations in a user interface where a presentation of multiple conversations and details of the conversations are efficiently navigated.

## BACKGROUND

An enterprise might store and access business information in a number of different ways. For example, an enterprise might store a substantial amount of information about production, sales, human resources, etc. in one or more database structures created by a business service provider (e.g., SAP AG®). In some cases, a business service provider hosts and provides business services for a client. For example, the business service provider might receive requests from the client and provide responses to the client via a service-oriented architecture such as those provided by SAP Business ByDesign®. In this way, the client may access information via one or more business user interface displays. The use of the remotely hosted business process platform may help the client avoid the costs and problems associated with maintaining a local, "in house" system or systems.

In some instances, an enterprise might want to let users access information via a web display that includes a large number of related data items. User displays have previously used horizontal and/or vertical navigation scroll bars and/or page-wise scrolls to navigate through large listings of related data items. However, using such navigation mechanisms are less than ideal, and may in fact be impractical, when the list of related data items to be displayed and analyzed via the user interface stretches beyond that which can be displayed at once in a display pane. Also, the navigation through a listing of related data items configured in a "tree" structure in a user interface may also be unwieldy and cumbersome, especially with a large number of related data items.

Accordingly, a method and mechanism for efficiently displaying and navigating related data items in a user interface may be provided by some embodiments herein.

## BRIEF DESCRIPTION OF THE DRAWINGS

FIG. **1** is a block diagram of a system according to some embodiments.

FIG. **2** is an example of a conversation explorer user interface page framework in accordance with some embodiments.

FIG. **3** is an illustration of a conversation explorer user interface page in accordance with some embodiments.

FIG. **4** is a flow diagram of a process according to some embodiments.

FIG. **5** illustrates a listing of related conversations in a conversation explorer user interface pane according to some embodiments.

FIG. **6** illustrates a detailed view of a case details pane according to some embodiments.

FIG. **7** is a block diagram of a system according to some embodiments.

## DETAILED DESCRIPTION

An enterprise might store and access business information in a number of different ways. For example, an enterprise

might store a substantial amount of information about production, sales, human resources, etc. in one or more database structures created by a business service provider (e.g., SAP AG®). FIG. **1** is a block diagram of a system **100** according to some embodiments. In this case, a business service provider **110** might host and provide business services for a client **105**. For example, the business service provider **110** might receive requests from client **105** and provide responses to the client **105** via a service-oriented architecture such as those provided by SAP Business ByDesign®. The use of the remotely hosted business process platform may enable client **105** to avoid the costs and resources associated with maintaining a local, "in house" application or system.

Client **105** may be associated with a Web browser to access services provided by business process platform **110** via HyperText Transport Protocol (HTTP) communication, via a smart client, or a mobile client. For example, a user may manipulate a user interface of the client **105** to input an instruction (e.g., "show me a sales report"). Client **105**, in response, may transmit a corresponding HTTP service request to business service provider **110** via network **115**, as illustrated. A service-oriented architecture may conduct any processing required by the request (e.g., generating views and user interfaces) and, after completing the processing, provides a response to client **105**. Client **105** may include a Personal Computer (PC) or mobile device executing a Web client. Examples of a Web client may include, but are not limited to, a Web browser, an execution engine (e.g., JAVA, Flash, Silverlight) to execute associated code in a Web browser, and/or a dedicated standalone application.

FIG. **1** represents a logical architecture for describing processes according to some embodiments, and actual implementations may include more, fewer, or different components arranged in configurations other than that specifically depicted in FIG. **1**. In some aspects, each system described herein may be implemented by any number of devices in communication via any number of other public and/or private networks. Two or more of the devices of may be located remote from one another and may communicate with one another via any known manner of network(s) and/or a dedicated connection. In some embodiments, each device may comprise any number of hardware and/or software elements suitable to provide the functions described herein as well as any other functions. Other topologies may be used in conjunction with other embodiments.

All systems and processes discussed herein may be embodied in program code stored on one or more computer-readable media. Such media may include, for example, a floppy disk, a CD-ROM, a DVD-ROM, one or more types of "discs", magnetic tape, a memory card, a flash drive, a solid state drive, and solid state Random Access Memory (RAM) or Read Only Memory (ROM) storage units. Embodiments are therefore not limited to any specific combination of hardware and software.

A number of "user interfaces" may be developed and/or provided by business service provider **110** (or a third party provider) to facilitate access to business information by client **105**. Business service provider **110** may store client information into and retrieve client information from one or more database structures, such one or more "business objects." As used herein, the phrase "business object" may refer to a set of entities with common characteristics and common behavior representing a defined business semantic. Note that business data may be stored within physical tables of a database. The database may comprise a relational database such as SAP MaxDB, Oracle, Microsoft SQL Server, IBM DB2, Teradata and the like. Alternatively, the database could be a multi-

dimensional database, an eXtendable Markup Language (XML) document, or any other structured data storage system. The physical tables may be distributed among several relational databases, dimensional databases, and/or other data sources.

In some aspects, client **105** may interact with database structures hosted by the business service provider **110** via one or more such business user interfaces (e.g., created by the business service provided **110** or by a third party provider (not shown). In some aspects, a single client **105** might be associated with a number of different users. For example, "end users" might represent employees of the client **105** who access information from business service provider **110** as part of their work responsibilities (e.g., to generate sales or to monitor financial information).

In some cases, client **105** might want to let users access certain types of information via a web "conversation explorer" user interface (e.g., a display that presents a plurality of conversations and a means for navigating amongst the presented conversations). As used herein, a conversation refers to a node of information. More particularly, multiple conversations may be related or linked to each other based on each of the conversations being associated with a common set of characteristics. For example, a number of conversations may be related to each other based on each of the conversations being associated with a same, particular business customer. It is noted that the common set of characteristics relating or linking a plurality of conversations to each other may vary depending on the attributes of the plurality of conversations. In some instances, the common set of characteristics may include one or more attributes. The attributes may include, for example and without limitation, a business entity, a business function, a business process, a task, a case, an invoice, a purchase order, a work order, etc. A conversation may encompass one or more types of communication, including for example, a telephone call, a face-to-face meeting, an email, a video conference/call, and other types of electronic messages and personal meetings. In some embodiments, a node of information comprising a conversation may include, for example, information records based on a communication by one person or entity such as, for example, a notebook, journal, log, and other one-party information record.

FIG. **2** is an illustration of a conversation explorer user interface **200** in its general structure, in accordance with some embodiments. Conversation explorer user interface **200** provides a logical representation of a conversation explorer user interface page in its general outline, in a simplified view. Conversation explorer user interface **200** might include one or more typical user interface components such as the menu bar, the tool bar, and the URL bar depicted in the upper portion of the conversation explorer user interface. Furthermore, conversation explorer user interface **200** includes a display pane **205**, which may include an "inbox". The inbox may include a listing of a plurality of business entities (e.g., a business group, client, partner, etc.) and business functions (e.g., sales, customer support, etc.). Conversation explorer user interface **200** may, according to some embodiments, also include a conversation pane **210** for displaying a linked list of related conversations. The linked list of conversations may be related based on each of the conversations being associated with a common set of characteristics (as will be discussed in greater detail below). According to some embodiments, conversation explorer user interface **200** may also include a conversation details pane **215**. As will be discussed in greater detail below, conversation details pane **215** may facilitate displaying details corresponding to multiple conversations included in the linked list of related conversations in conversation pane

**210**. That is, conversation details pane **215** displays the details for multiple conversations simultaneously (e.g., List Details **1** and List Details **2**). In some aspects, the conversation details pane may facilitate contextual decision-making by presenting separated nodes in a display wherein navigation of the conversations may be accomplished efficiently and easily.

In some embodiments, aspects of the conversation explorer user interface **200** may be integrated into business user interface pages. The general configuration of the conversation explorer user interface as represented by the conversation explorer user interface **200** of FIG. **2** may vary in some embodiments. However, certain aspects may be consistently included in a conversation explorer in accordance with embodiments herein such that a plurality of conversations may be efficiently presented and navigated in a user interface.

FIG. **3** illustrates a conversation explorer user interface **300** in accordance with some embodiments. Some aspects and components of conversation explorer user interface **300** may be typical of a user interface provided by a business service provider. As such, conversation explorer user interface **300** may, in some aspects, have a "look and feel" similar to a user interface of other user interface pages developed and/or provided by the business service provider. For example, the user greeting in the upper left-hand corner, the main tool bar, and "roles" tool bar **305** may all comply with a general user interface framework of the business service provider **110**.

In some embodiments, an inbox **310** includes a listing of "cases" for the user of conversation explorer user interface **300**. The cases displayed in inbox **310** may vary depending on the context of the user's "role". In addition to providing a listing of the user's cases in inbox **310**, a status bar **315** provides a mechanism for the user to select which type of cases are displayed in the inbox. For example, the user may select to display cases that are "new", "in process", "waiting for approval", and those that are "closed", as shown by the selections made in status bar **315**. It is noted that cases of these and other statuses (including those not shown in FIG. **3**) may be selectable in some embodiments. For the listing of the cases having a status matching the selected status(es), inbox **310** further includes a case identifier **317** that uniquely identifies each case, a subject **319** descriptive of what the case concerns, a customer name **321** of a person associated with the case, a creation date (**323**) for the case, a date regarding the last activity in the case (**325**), a category (**327**) the case relates to, and an escalation level (**329**) indicating an importance of the case.

The plurality of cases in inbox **310** may each have a plurality of related conversations associated therewith. In some instances, the number of conversations related to any one case may number in the dozens or even hundreds. Accordingly, it might not be efficient, aesthetically appealing, or practical to provide a complete listing of all of the conversations related to a selected case in inbox **310** (e.g., case "221/02/2008/LE) in case details pane **330**. In accordance with embodiments herein, a listing of the conversations related to the selected case in inbox **310** are divided (i.e., split) into two sets of conversations, a first set **340** and a second set **345**, and presented for display in case details pane **330**. For example, first set **340** may be, in terms of a time/date value associated with the conversations, the first five (5) conversations related to the selected case and second set **345** may be last five (5) conversations related to the selected case. The first and last conversations related to a case may initially and automatically be presented in response to the selection of a case in inbox **310**.

In some embodiments, the conversations presented in case details pane **330**, including the conversations in the first set **340** and the second set **345**, are sequentially ordered based on

a date/time value associated with each conversation. The time/date value associated with each conversation may reflect the time and date the conversation occurred. Moreover, the conversations may each have an identifier denoting their ordered relationship with the other related conversations (e.g. Conv **6**, Conv **7**, Conv **8**, . . . ).

In some embodiments, the number of conversations displayed in the first set of conversations **340** and the second set of conversations **345** may be limited to five (5) as shown in the example of FIG. **3**. In some embodiments, the value of the number of conversations displayed in case details pane **330** may be a configuration value determined by a user interface designer during a design time development of conversation explorer user interface **300**. In some other instances, the value of the number of conversations displayed in case details pane **330** may be set by a user according to their preferences. In some instances, the value of the number of conversations displayed in case details pane **330** may be determined by a combination of design specifications and user preferences.

Each of the first set **340** and the second set **345** of conversations in case details pane **330** may be navigated to move forwards or backwards through the conversations related to the selected case. Moreover, the first set **340** and the second set **345** of conversations in case details pane **330** may be navigated independently of each other. The cases displayed in the first set **340** may be, for example, advanced by navigation of the conversation explorer user interface from displaying conversations **6-10** to displaying conversations **8-12** while the second set **345** continues to display conversations **22-26**. In some embodiments, first set **340** can navigate until node (n−1), where n is the first node displayed in second set **345**. Similarly, second set **345** may navigate upwards until node n, where n−1 is the last node displayed in the first set **340**.

Conversation explorer user interface page **300** further illustrates conversation details pane **355**, including tool bar **360**. Conversation details pane **355** displays, simultaneously, conversation details relating to multiple conversations. As shown, details relating to conversation **10** and conversation **22** are displayed in details pane **365** and details pane **370**, respectively. Conversation details relating to conversations **10** and **22** are displayed in the conversation details panes since conversations **10** and **22** have been selected in case details pane **330**. All of the conversation details associated with each selected conversation may be viewed using the navigation controls on the right side of the details pane **365** and details pane **370**. The conversation details pane **365** and conversation details pane **370** may each be navigated independently of the other. In some embodiments, the conversation details may be automatically presented in details panes **365**, **370** upon selection of the corresponding conversation in case details pane **330**.

In some aspects, conversation details may be displayed for two (2) conversations at any one time, as illustrated in FIG. **3**. In some other embodiments, conversation details may be displayed for more than two (2) conversations at the same time, all without a need to generate, open, or use a new user interface display pane.

Still referring to FIG. **3**, it is noted that presenting the conversation details for multiple conversations grouped together or in close proximity to each other as depicted in conversation details pane **355** may facilitate a user of the conversation explorer user interface in making a business decision. For example, by providing details to multiple conversations displayed in a same user interface pane (e.g. conversations details pane **355**), in close proximity to each other and at the same time, the user may be aided in making a contextual decision based on the displayed of the details of

the multiple conversations. Also, case details pane **330** provides "context" by showing what conversations occurred before and/or after the selected conversations (e.g., Conv **10** and Conv **22**). Thus, the presentation of conversation details for multiple conversations in details panes **365**, **370** of the conversation explorer user interface page **300** may provide the user with a broader "view" or insight into the context of the issues of a particular case **350** since the user may simultaneously view the details of multiple conversations, including conversations occurring at different times/dates.

FIG. **4** is a flow diagram of a process **400** for providing a conversation explorer user interface in accordance with some embodiments herein. In some embodiments, a conversation explorer user interface (e.g., **300**) may be provided to a number of client users (e.g., **105**) by a business service provider (**110**), as illustrated in FIGS. **1** and **3**. However, process **400** may be applicable in contexts and operational environments other than that specifically depicted in FIG. **1** and by a conversation explorer configured, in some aspects, differently than the user interface depicted in FIG. **3**.

At operation **405**, a list of a plurality of conversations is received. The plurality of conversations included in the received list are each related to each other based on some common set of characteristics. The common set of characteristics may include one or more characteristics shared by each of the conversations. For example, each of the conversations in the received list may relate to a particular customer of a business. Further, all of the conversations may relate to a particular project for that particular customer. Thus, in this example the common set of characteristics may include the customer's name and the particular work order for that customer. It is noted however that other, additional, more, fewer, or alternative characteristics may be included in the common set of characteristics, depending on a use-case, user preferences, business considerations, and other factors.

It is further noted that each of the conversations in the list of received conversations may have conversation details associated therewith. The conversation details for each conversation may, in general, at least include an indication of the case, task, or other characteristic or attribute unifying the multiple related conversations; a subject for the conversation; name(s) of the participants in the conversation; a time/date stamp indicating when the conversation occurred; the communication mode or type of the conversation; and a field to contain other data (e.g., notes, etc.), including free form data.

At operation **410**, at least a portion of the list of the plurality of conversations received at operation **405** is presented or displayed in a user interface. Whereas there may be no limit on the total number of related conversations received at **405**, the number of the received conversations displayed at operation **410** may be limited to a number established by a designer of the conversation explorer user interface based on design considerations and/or a user of the conversation explorer user interface based on personal preferences or use considerations. As illustrated in the case details pane **330** of FIG. **3**, a total of ten (10) cases may be presented at any one time therein, where the conversations are split into a first set of five (5) conversations **340** and a second set of five (5) conversations **345**. Again, it is noted that the total number of conversations presented for display in the case details pane **330** and the number of conversations included in each set of conversations **340** and **345** may be more or different than those values specifically illustrated in the examples herein, in accordance with some embodiments.

Continuing with process **400**, a selection of a plurality of the conversations included in the list of conversations presented in the user interface at operation **410** is received at

operation **415**. The received selection of conversations may correspond to a user's action to select a number of cases displayed in the user interface. Referring to FIG. **3**, the user may select conversation **10** (i.e., "Conv-**10**") from the first set of conversations **340** and select conversation **22** (i.e., "Conv-**22**") from the second set of conversations **345**, as illustrated by the highlighting of those particular conversations in case details pane **330**. In some embodiments, two (2) or more of the conversations may be selected at operation **415**, from any of the conversations presented in the cased details pane **330**.

At operation **420**, case details associated with each of the plurality of conversations selected at operation **415** are presented in the user interface. In particular, the case details associated with the plurality of conversations selected at operation **415** are presented simultaneously and further grouped in close proximity to each other. Accordingly, the details corresponding to multiple conversations may be efficiently and readily viewed, concurrently, by a user. Referring again to FIG. **3**, conversation details associated with the selected conversations (e.g., conversations "**10**" and "**22**") are displayed in conversation details pane **355** and more particularly details panes **365** and **370**. As shown in FIG. **3**, each of the specific conversation details panes **365** and **370** have their own navigation controls (e.g., a vertical scroll-bar) so that the full extent of the information contained in the conversations details for each conversation may be fully navigated by the user while only occupying a portion of the user interface's **300** total landscape.

In some embodiments, the process(es) and system(s) herein may be integrated or interfaced with any type of "inbox". For example, a single reusable user interface in accordance with embodiments herein may be implemented in a back-end system of a business service provider that adheres to a model-driven architecture.

In some embodiments, a user may "jump" directly to a specific conversation by specifying a specific conversation. Using a pre-determined key entry (e.g., "F10" key) or sequence of key entries (e.g., "Ctrl"+"J"), a user may navigate directly to (i.e., "jump" to) a specified conversation. For example, a user may enter the pre-determined key entry. The system providing the conversation explorer user interface may receive an indication of a request for a specific one of the plurality of conversations based on the user provided key entry. In reply to the key entry, the user may be prompted to enter an identifier for a specific conversation. For example, if there are 90 conversations related to a particular case and the user wants to navigate to conversation **25**, the user may enter the case identifier "**25**" when prompted for an entry. Upon the entry of "**25**", the system may receive the selection of the specific one of the plurality of conversations and respond by presenting conversation **25** in the case details pane **300** and the corresponding conversation details in conversations details pane **355**, simultaneously and grouped together in the user interface with conversation details of the other selected conversations.

FIG. **5** illustrates a detailed view **500** of a listing of related conversations in a conversation explorer user interface pane according to some embodiments. In particular, a case details pane **505** is illustrated. Case details pane **505** may form a part of a conversation explorer user interface, in accordance with some embodiments such as but not limited to the user interfaces depicted in FIGS. **2** and **3**. Case details pane **505** includes an indication or representation of the case ID, "221/02/2008/LE", the conversations displayed therein relate to. Further, case details pane **505** includes a first set of conversations **515** and a second set of conversations **520**, where navigation controls **525** and **530** provide a mechanism for a

user to scroll through the conversations related to the selected case and determine which ones are displayed in the first set **515**. Navigation controls **535** and **540** provide a mechanism for a user to scroll through the conversations related to the selected case **510** and determine which ones are displayed in the second set **520**. In some embodiments, the first set **515** corresponds to the first five (5) conversations time-wise related to the selected case **510** and the second set **520** corresponds to the last five (5) conversations time-wise related to the selected case **510**, in the example of FIG. **5**. The entire list of conversations related to the selected case **510** may be viewed by scrolling through the conversations using navigations controls **525**, **530**, **535**, and **540**.

In some aspects, navigation of the first set **515** and the second set **520** are separate and independent of each other. In some aspects, one or more of the navigation controls may not be selectable when a navigation option is not available for use. For example, as depicted in FIG. **5** navigation control **525** is not available for selection since the first conversation (i.e., "Conv-**1**") in the list of the conversations related to case **510** is already displayed. Likewise, navigation control **540** is not available for selection since the last conversation (i.e., "Conv-**38**") in the list of the conversations related to case **510** is already displayed. Accordingly, navigation controls **525** and **540** may be disabled for selection, as indicated by the lighter representation of those controls.

Case details pane **505** also displays an icon indicative of the type or mode of communication used for each of the conversations presented therein, in accordance with some embodiments. The icons may represent any type or mode of communication, whether electronic (e.g., emails, text messages, telephonic, etc.) or a live face-to-face conversation or meeting. In the example of FIG. **5**, icon **550** denotes a conversation conducted by telephone, icon **555** denotes a conversation conducted by video conference, and icon represents a conversation conducted by email. It is noted that fewer, more, or alternative icons may be used, if at all, to represent the type of communication used in conducting the displayed conversations.

As illustrated at **545**, the conversations displayed in case details pane **505** may each optionally have a label or "tag" associated therewith. Where a conversation has a "PIN ME" representation at **545**, no label is yet associated with that conversation. The conversation label or "tag" may be pinned to a conversation by a user. The label or tag **545** may be dynamically created by the user at the conversation level as the user interacts with the conversation explorer user interface. That is, labels need not be created previously (e.g., by a user interface designer) in order to be associated with a conversation. In some embodiments, a user may create labels or tags **545** ad-hoc "on-the-fly" as they interact with the user interface(s) herein. A user may create the label or tag **545** or be provided with a list of default or user-defined labels or tags from which to select for associating with a particular conversation. In the example of FIG. **5** two (2) labels are shown, a "REQ QT" (i.e., request quote) tag and a "CLOSED" (i.e., the conversation is closed from the user's point of view, with no further action required or anticipated) tag, although other or alternative labels or tags may be provided, as suited to a use, context, and preference. In some embodiments associating (i.e., "pinning") a label with a conversation/node may be a single step procedure, in contrast to a multi-step procedure where a label is first created and then associated with the conversation/node to pin it to the conversation/node. In some embodiments herein, the label creation and association with the node occurs simultaneously.

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In some embodiments, selection of "VIEW" button **565** may invoke a mechanism to filter the conversations displayed in case details pane **505** based on the labels or tags designated in a filter selection menu. FIG. **6** provides a detailed display of a case details pane **605** from a conversation explorer user interface **600**. As illustrated, case details pane **605** includes a case ID **610** and a listing of conversations **615**. Additionally, case details pane **605** shows that selection of the View button causes a drop-down View menu **625** to be displayed. View menu **625** includes a list of labels or tags that may be used for filtering the list of conversations displayed. For example, selecting "All" from View menu **625** will cause all of the conversations to be displayed, notwithstanding the label or tag associated with the conversations. Selecting one of the other tags (e.g., "REQ QT", "CLOSED", or "MSG" (i.e., a message that needs to be followed-up) will filter the list of conversations such that only those conversations associated with the selected label(s) or tag(s) will be presented in the case details pane **605**. In some embodiments, one or more labels may be selected for filtering purposes via View menu **625**. As illustrated in FIG. **6**, "REQ QT" label **630** is selected such that only conversations having an associated "REQ QT" label or tag will be displayed in case details pane **605**.

FIG. **7** is a block diagram overview of a system or apparatus **700** according to some embodiments. System **700** may be, for example, associated with any of the devices described herein, including for example client **105** and business service provider **110**. System **700** comprises a processor **705**, such as one or more commercially available Central Processing Units (CPUs) in the form of one-chip microprocessors or a multi-core processor, coupled to a communication device **715** configured to communicate via a communication network (not shown in FIG. **7**) to another device or system. In the instance system **700** comprises an application server, communication device **715** may provide a means for system **700** to interface with a client device (e.g., client **105**). System **700** may also include a local memory **710**, such as RAM memory modules. The system **700** further includes an input device **720** (e.g., a touch screen, mouse and/or keyboard to enter content) and an output device **725** (e.g., a computer monitor to display a user interface element).

Processor **705** communicates with a storage device **730**. Storage device **730** may comprise any appropriate information storage device, including combinations of magnetic storage devices (e.g., a hard disk drive), optical storage devices, and/or semiconductor memory devices. In some embodiments, storage device may comprise a database system.

Storage device **730** stores a program code **735** that may provide computer executable instructions for processing requests from, for example, client devices in accordance with processes herein. Processor **705** may perform the instructions of the program **735** to thereby operate in accordance with any of the embodiments described herein. Program code **735** may be stored in a compressed, uncompiled and/or encrypted format. Program code **735** may furthermore include other program elements, such as an operating system, a database management system, and/or device drivers used by the processor **705** to interface with, for example, peripheral devices. Storage device **730** may also include data **740**. Data **740** may be used by system **700**, in some aspects, in performing the processes herein, such as process **400**.

Embodiments have been described herein solely for the purpose of illustration. Persons skilled in the art will recognize from this description that embodiments are not limited to those described, but may be practiced with modifications and alterations limited only by the spirit and scope of the appended claims.

What is claimed is:

1. A computer-implemented method for presenting a plurality of conversations in a user interface, the method comprising:

receiving a linked list of a plurality of related conversations, the related conversations each being associated with a common set of characteristics and each of the plurality of related conversations having its own associated conversation content details;

presenting at least a portion of the linked list of the plurality of related conversations within a first display pane of a user interface, the related conversations included in the presented portion of the linked list being divided into a split listing comprising separate listings of multiple sets of the related conversations with each of the sets of the related conversations being separately and simultaneously presented in a grouping in the first display pane, where the presented portion of the linked list includes multiple conversations and each set includes a listing of at least two conversations and each of the sets of the related conversations are presented with navigation controls for selectively displaying specific conversations within each respective set of the related conversations; and

presenting, in response to a selection of at least two different conversations included in the presented portion of the linked list of related conversations in the first display pane, conversation content details associated with each of the selected at least two different conversations, the presented conversation content details for the selected at least two conversations being presented in close proximity with each other in a second display pane within the user interface, simultaneously with the presented portion of the linked list of the plurality of related conversations in the first display pane of a user interface.

2. The method of claim **1**, wherein two different conversations of the conversations included in the presented portion of the list are selected and, in response to the selection of the two different conversations, conversation content details associated with each of the selected two different conversations are presented in the user interface, the conversation details associated with each of the selected two different conversations being presented simultaneously with the presented portion of the linked list and each other and grouped together in the second display pane of the user interface, separate and apart from the presented portion of the list.

3. The method of claim **1**, wherein the related conversations have an associated unique identifier to distinguish the plurality of conversations from each other.

4. The method of claim **1**, wherein the plurality of the related conversations included in the presented portion of the list are presented in a predetermined order in accordance with a date/time value of each conversation.

5. The method of claim **1**, wherein the presented portion of the linked list includes a grouping of a first set of sequentially ordered related conversations and a grouping of a second set of sequentially ordered different related conversations.

6. The method of claim **5**, wherein the number of conversations in the first set of sequentially ordered related conversations and the second set of sequentially ordered different related conversations are based on at least one of a predetermined value or user-configurable value.

7. The method of claim **5**, further comprising:

receiving user input via the user interface to navigate among the related conversations in the grouping of the first set of sequentially ordered related conversations; and

receiving user input via the user interface to navigate among the related conversations in the grouping of the second set of sequentially ordered related conversations, wherein navigation amongst the related conversations in the first and second sets of related conversations is independent of each other.

8. The method of claim 1, further comprising:

receiving an indication of a label identifier to associate with one or more specific conversations in the presented portion of the list; and

associating the received indication of the label identifier with the one or more specific conversations.

9. The method of claim 1, further comprising:

receiving an indication of a request for a specific one of the plurality of related conversations, wherein the specific one of the plurality of related conversations is one of the selected at least two different conversations.

10. The method of claim 1, wherein the common set of characteristics comprises at least one of a case, a task, a customer, a business process, an activity, an invoice, a purchase order, a business activity, and a business entity.

11. The method of claim 1, further comprising presenting an icon indicative of a type of communication used for each of the related conversations presented in the conversation details.

12. A service provider system, comprising:

a memory having program instructions stored thereon; and

a processor in communication with the memory, the processor being operative to:

receive a linked list of a plurality of related conversations, the related conversations being associated with a common set of characteristics and each of the plurality of related conversations having associated conversation content details;

present at least a portion of the linked list of the plurality of related conversations within a first display pane of a user interface, the related conversations included in the presented portion of the linked list being divided into a split listing comprising separate listings of multiple sets of the related conversations with each of the sets of the related conversations being separately and simultaneously presented in a grouping in the first display pane, where the presented portion of the linked list includes multiple conversations and each set includes a listing of at least two conversations and each of the sets of the related conversations are presented with navigation controls for selectively displaying specific conversations within each respective set of the related conversations; and

present, in response to a selection of at least two different conversations included in the presented portion of the linked list of related conversations in the first display pane, conversation content details associated with each of the selected at least two different conversations, the presented conversation content details of the selected at least two conversations being presented in close proximity with each other in a second display pane within the user interface, simultaneously with the presented portion of the linked list of the plurality of related conversations in the first display pane of a user interface.

13. The system of claim 12, wherein two different conversations of the conversations included in the presented portion of the list are selected and, in response to the selection of the two different conversations, conversation content details associated with each of the selected two different conversations are presented in the user interface, the conversation details associated with each of the selected two different conversations being presented simultaneously with the presented portion of the linked list and each other and grouped together in the second display pane of the user interface, separate and apart from the presented portion of the list.

14. The system of claim 12, wherein the related conversations have an associated unique identifier to distinguish the plurality of conversations from each other.

15. The system of claim 12, wherein the plurality of the related conversations included in the presented portion of the list are presented in a predetermined order in accordance with a date/time value of each conversation.

16. The system of claim 12, wherein the presented portion of the linked list includes a grouping of a first set of sequentially ordered related conversations and a grouping of a second set of sequentially ordered different related conversations.

17. The system of claim 16, wherein the number of conversations in the first set of sequentially ordered related conversations and the second set of sequentially ordered different related conversations are based on at least one of a predetermined value or user-configurable value.

18. The system of claim 16, further comprising:

receiving user input via the user interface to navigate among the related conversations in the grouping of the first set of sequentially ordered conversations; and

receiving user input via the user interface to navigate among the related conversations in the grouping of the second set of sequentially ordered related conversations, wherein navigation amongst the related conversations in each of the first and second sets of related conversations is independent of each other.

19. The system of claim 12, further comprising:

receiving an indication of a label identifier to associate with one or more specific conversations in the presented portion of the list; and

associating the received indication of the label identifier with the one or more specific conversations.

20. The system of claim 12, further comprising:

receiving an indication of a request for a specific one of the plurality of related conversations, wherein the specific one of the plurality of related conversations is one of the selected at least two different conversations.

21. The system of claim 12, wherein the common set of characteristics comprises at least one of a case, a task, a customer, a business process, an activity, an invoice, a purchase order, a business activity, and a business entity.

22. The system of claim 12, further comprising presenting an icon indicative of a type of communication used for each of the related conversations presented in the conversation details.

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